

FORM

2

Rev  
12/05

## State of Colorado

## Oil and Gas Conservation Commission

1120 Lincoln Street, Suite 801, Denver, Colorado 80203 Phone: (303) 894-2100 Fax: (303) 894-2109



Document Number:

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Date Received:

07/26/2013

PluggingBond SuretyID

20100017

## APPLICATION FOR PERMIT TO:

1. ☒ Drill, ☐ Deepen, ☐ Re-enter, ☐ Recomplete and Operate

## 2. TYPE OF WELL

OIL ☐ GAS ☒ COALBED ☐ OTHER \_\_\_\_\_  
 SINGLE ZONE ☒ MULTIPLE ☐ COMMINGLE ☐

Refiling ☐Sidetrack ☐

3. Name of Operator: ENCANA OIL &amp; GAS (USA) INC

4. COGCC Operator Number: 100185

5. Address: 370 17TH ST STE 1700

City: DENVER State: CO Zip: 80202-5632

6. Contact Name: Erin Hochstetler Phone: (720)876-5827 Fax: ()

Email: erin.hochstetler@encana.com

7. Well Name: Edith Ann-Duckworth Well Number: 4G-21H O268

8. Unit Name (if appl): Unit Number:

9. Proposed Total Measured Depth: 16994

## WELL LOCATION INFORMATION

10. QtrQtr: SWSW Sec: 21 Twp: 2N Rng: 68W Meridian: 6

Latitude: 40.117610 Longitude: -105.003450

Footage at Surface: 264 feet FNL/FSL 1306 feet FEL/FWL  
 FSL FEL

11. Field Name: WATTENBERG Field Number: 90750

12. Ground Elevation: 4927 13. County: WELD

## 14. GPS Data:

Date of Measurement: 06/06/2013 PDOP Reading: 2.0 Instrument Operator's Name: JOHN RICE

15. If well is ☐ Directional ☒ Horizontal (highly deviated) submit deviated drilling plan.

Footage at Top of Prod Zone: FNL/FSL FEL/FWL Bottom Hole: FNL/FSL FEL/FWL  
 941 FSL 324 FEL 460 FNL 450 FEL  
 Sec: 21 Twp: 2N Rng: 68W Sec: 16 Twp: 2N Rng: 68W

16. Is location in a high density area? (Rule 603b)? ☐ Yes ☒ No

17. Distance to the nearest building, public road, above ground utility or railroad: 250 ft

18. Distance to nearest property line: 264 ft 19. Distance to nearest well permitted/completed in the same formation(BHL): 85 ft

## 20. LEASE, SPACING AND POOLING INFORMATION

Objective Formation(s)	Formation Code	Spacing Order Number(s)	Unit Acreage Assigned to Well	Unit Configuration (N/2, SE/4, etc.)
NIOBRARA	NBRR		640	GWA

21. Mineral Ownership: ☒ Fee ☐ State ☐ Federal ☐ Indian Lease #: \_\_\_\_\_22. Surface Ownership: ☒ Fee ☐ State ☐ Federal ☐ Indian23. Is the Surface Owner also the Mineral Owner? ☐ Yes ☒ No Surface Surety ID#:23a. If 23 is Yes: Is the Surface Owner(s) signature on the lease? ☐ Yes ☒ No23b. If 23 is No: ☒ Surface Owners Agreement Attached or ☐ \$25,000 Blanket Surface Bond ☐ \$2,000 Surface Bond ☐ \$5,000 Surface Bond

24. Using standard QtrQtr, Sec, Twp, Rng format enter entire mineral lease description upon which this proposed wellsite is located (attach separate sheet/map if you prefer):

T2N-R68W Sec 16: N2NE. Horizontal Wellbore crosses lease lines within drilling and spacing unit; distance to lease line is 0'; distance to unit boundary is at least 460'.

25. Distance to Nearest Mineral Lease Line: 0 ft

26. Total Acres in Lease: 80

### DRILLING PLANS AND PROCEDURES

27. Is H2S anticipated? ☐ Yes ☒ No If Yes, attach contingency plan.

28. Will salt sections be encountered during drilling? ☐ Yes ☒ No

29. Will salt (>15,000 ppm TDS CL) or oil based muds be used during drilling? ☐ Yes ☒ No

30. If questions 28 or 29 are yes, is this location in a sensitive area (Rule 901.e)? ☐ Yes ☐ No

31. Mud disposal: ☒ Offsite ☐ Onsite

If 28, 29, or 30 are "Yes" a pit permit may be required.

Method: ☐ Land Farming ☒ Land Spreading ☐ Disposal Facility Other: \_\_\_\_\_

Note: The use of an earthen pit for Recompletion fluids requires a pit permit (Rule 905b). If air/gas drilling, notify local fire officials.

Casing Type	Size of Hole	Size of Casing	Wt/Ft	Csg/Liner Top	Setting Depth	Sacks Cmt	Cmt Btm	Cmt Top
CONDUCTOR	22	16	30	0	80	80	80	0
SURF	12+1/4	9+5/8	40	0	800	100	800	0
1ST	8+3/4	7	26	0	7743	438	7743	500
2ND	6+1/8	4+1/2	13.5	0	16993	362	16993	7443

32. BOP Equipment Type: ☒ Annular Preventer ☒ Double Ram ☒ Rotating Head ☐ None

33. Comments Encana requests the approval of a 318A.a.(1) and 318A.c(1) exception location as the well head is to be located outside of a GWA drilling window and further than 50' from an existing well. Request letter and waivers attached. This well is closer than 150' to the nearest permitted or producing BHL. A 318A.m. variance request letter and waivers are attached. Encana requests the approval of the omission of open hole logs; request letter attached. Proposed spacing unit is T2N-R68W Sec 15: W2W2 Sec 16: E2E2 Sec 21: E2E2 Sec 22: W2W2. The distance to nearest well permitted/completed in the same formation (BHL) is the Duckworth 41-16, API # 05-123-25477.

34. Location ID: \_\_\_\_\_

35. Is this application in a Comprehensive Drilling Plan ? ☐ Yes ☐ No

36. Is this application part of submitted Oil and Gas Location Assessment ? ☒ Yes ☐ No

I hereby certify all statements made in this form are, to the best of my knowledge, true, correct, and complete.

Signed: \_\_\_\_\_ Print Name: Erin Hochstetler

Title: Permitting Technician Date: 7/26/2013 Email: erin.hochstetler@encana.com

Operator must have a valid water right or permit allowing for industrial use or purchased water from a seller that has a valid water right or permit allowing for industrial use, otherwise an application for a change in type of use is required under Colorado law. Operator must also use the water in the location set forth in the water right decree or well permit, otherwise an application for a change in place of use is required under Colorado law. Section 37-92-103(5), C.R.S. (2011).

Based on the information provided herein, this Application for Permit-to-Drill complies with COGCC Rules and applicable orders and is hereby approved.

COGCC Approved: Matthew Lee Director of COGCC Date: 9/18/2013

#### API NUMBER

05 123 38074 00

Permit Number: \_\_\_\_\_ Expiration Date: 9/17/2015

#### CONDITIONS OF APPROVAL, IF ANY:

All representations, stipulations and conditions of approval stated in the Form 2A for this location shall constitute representations, stipulations and conditions of approval for this Form 2 Permit-to-Drill and are enforceable to the same extent as all other representations, stipulations and conditions of approval stated in this Permit-to-Drill.

<b>COA Type</b>	<b>Description</b>
	1) Submit Form 42 electronically to COGCC 48 hours prior to MIRU. 2) Comply with Rule 317.i and provide cement coverage from end of 7" casing to a minimum of 200' above Niobrara and from 200' below the Shannon to 200' above Sussex. Verify coverage with cement bond log. 3) Comply with Rule 321. Run and submit Directional Survey from TD to base of surface casing. Ensure that the wellbore complies with setback requirements in commission orders or rules prior to producing the well.
	Operator must meet water well testing requirements per Rule 318A.
	Operator acknowledges the proximity of the Kennedy Gas Unit 1 API #123-09360, and the Jillson Gas Unit 1 API #123-097583 wells; Operator agrees to: provide mitigation option 1 or 2 (per the DJ Basin Horizontal Offset Policy) to mitigate the situation, ensure all applicable documentation is submitted based on the selected mitigation option chosen, and submit a Form 42 ("OTHER – AS SPECIFIED BY PERMIT CONDITION") stating what appropriate mitigation occurred and that it has been completed, prior to the hydraulic stimulation of this well.

### **Applicable Policies and Notices to Operators**

Notice Concerning Operating Requirements for Wildlife Protection.

Policy for Bradenhead Monitoring During Hydraulic Fracturing Treatments in the Greater Wattenberg Area.

### **Attachment Check List**

<b>Att Doc Num</b>	<b>Name</b>
1695876	SURFACE AGRMT/SURETY
400446741	FORM 2 SUBMITTED
400447220	WELL LOCATION PLAT
400447221	DEVIATED DRILLING PLAN
400447223	DIRECTIONAL DATA
400454729	OFFSET WELL EVALUATION
400454730	30 DAY NOTICE LETTER
400454732	OTHER
400454734	PROPOSED SPACING UNIT
400454739	VARIANCE REQUEST
400454744	EXCEPTION LOC REQUEST
400454746	EXCEPTION LOC WAIVERS

Total Attach: 12 Files

## General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Final Review Completed. No LGD or public comment received.	9/17/2013 2:45:35 PM
Permit	Received and attached SUA. Unchecked Surface Owner is Mineral Owner and is committed to an O&G lease and is executer of O&G lease. Added right to construct is granted by SUA. ok to pass.	9/6/2013 11:36:20 AM
Permit	ON HOLD: requesting SUA that covers SHL in Sec 21. Mineral lease covers T2N-R68W Sec 16: N2NE.	8/26/2013 1:13:18 PM
Permit	Operator requests approval of a Rule 318Am exception location: Wellbore is to be located less than 150' from an existing wellbore. Request and waivers attached.	8/26/2013 1:13:17 PM
Permit	Operator requests approval of a Rule 318Aa and Rule 318Ac exception location: Wellhead is to be located outside of a GWA drilling window and will be located more than 50' from an existing well location. Request and waivers attached.	8/26/2013 1:13:16 PM
Permit	Operator's request for omission of open hole logs.	8/26/2013 1:13:15 PM
Permit	Horizontal wellbore crosses lease lines within drilling and spacing unit; distance to lease line is 0'; distance to unit boundary is 460'.	8/26/2013 1:13:14 PM

Total: 7 comment(s)

## Best Management Practices

<u>No</u>	<u>BMP/COA Type</u>	<u>Description</u>
1	Drilling/Completion Operations	Prior to drilling operations, Operator will perform an anti-collision scan of existing offset wells that have the potential of being within close proximity of the proposed well. This anti-collision scan will include definitive MWD or gyro surveys of the offset wells with included error of uncertainty per survey instrument, and compared against the proposed wellpath with its respective error of uncertainty. If current surveys do not exist for the offset wells, Operator may have gyro surveys conducted to verify bottomhole location. The proposed well will only be drilled if the anti-collision scan results indicate that there is not a risk for collision, or harm to people or the environment. For the proposed well, upon conclusion of drilling operations, an as-constructed gyro survey will be submitted to COGCC with the Form 5.
2	Drilling/Completion Operations	Encana will comply with the "COGCC Policy for Bradenhead Monitoring During Hydraulic Fracturing Treatments in the Greater Wattenberg Area", dated May 29, 2012.

Total: 2 comment(s)